

**PART I Authorization to Operate**

- A. The permittee is authorized to operate a Class V Injection Well at the facility described in the revised permit application and in the cover page of this permit, in accordance with the provisions set forth in this permit. In the case of this permit, the subsurface field line drainage system is defined as the injection well.
- B. Only the wastewater described in the revised permit application shall be injected.
- C. Offal, whole blood, animal by-products, fat, manure, hair, and/or other animal waste(s) must not enter the treatment system. All animal wastes must be separated and managed separately from the facility wash down water.
- D. This permit and the authorization to inject shall remain in effect until the expiration date stated on the cover page of this permit. If the permittee desires to continue injection past the expiration date of this permit, the permittee shall request a permit reissuance at least 180 days prior to expiration of this permit.

**PART II Construction Requirements**

- A. Injection Well Requirements
  - 1. The permittee shall maintain a wastewater treatment system described in the Certificate of Implementation dated March 28, 2017, and the Wastewater Treatment Engineering Report dated March 1, 2016.
  - 2. The permittee shall inject only washdown water that has been treated by passing through the wastewater treatment system referenced in Part II A. 1. Above.
  - 3. The injection rate of treated wastewater into the field line system shall not exceed the daily average design flow of 2000 gallons per day.
  - 4. Injected effluent shall not surface from the effluent disposal system.
  - 5. The field line system shall be located in the area identified by the revised permit application.
  - 6. The disposal field area shall be maintained so that standing or ponded water resulting from precipitation does not occur.
  - 7. Adequate select soil fill material shall be maintained on the disposal field in areas where shallow subsurface soil restrictive features might limit effluent absorption.
  - 8. The permittee shall maintain a thriving vegetated cover on the disposal field area throughout the year and must overseed the disposal field area when necessary to maintain a cover crop.

9. All treatment and disposal system components and equipment shall be sufficiently installed, inspected, monitored, and maintained.
10. The loading rate of treated wastewater shall not exceed the design hydraulic soil loading rate specified in the revised permit application.

**B. Modifications**

A permit modification shall be obtained prior to modification of any injection well or supporting surface. Modification shall mean any action that will change the configuration of the well beneath the surface, the methods of monitoring injection, or will result in injection of a fluid not specifically authorized by this permit.

**PART III Monitoring and Operating Requirements**

**A. Groundwater Monitoring Requirements**

1. The permittee shall maintain groundwater monitoring wells sufficient to monitor groundwater quality immediately hydraulically downgradient of the disposal field. The permittee shall make any modifications to the monitoring plan, as deemed necessary by ADEM.
2. Each monitoring well shall include the following.
  - a) The permittee shall screen each monitoring well in the uppermost saturated zone. The well screen shall be of sufficient length to account for seasonal fluctuations in the water table and effects of the subsurface effluent disposal system.
  - b) The annulus around each well casing above the well screen shall be sealed with bentonite to prevent the passage of surface water into the injection zone.
  - c) The surface installation shall include a concrete protective pad around the base of the well, a metal protective casing, and a locking cap.
3. All surface water shall be routed away from the monitoring well's surface installation.
4. The monitoring well installation shall be completed and monitoring wells shall be sampled for background water quality prior to the use of the drip fields.
5. The permittee shall submit as built descriptions and geologic logs of monitoring wells within 60 days after drilling.
6. The permittee shall monitor the groundwater as specified in Appendix B of this permit.
7. The permittee shall not exceed the limits established in Appendix B of this permit.

**B. Test Procedures**

Test procedures for the analysis of pollutants shall conform to 40 CFR Part 136 of the Federal Register and guidelines published pursuant to Section 304(h) of the Federal Water Pollution Control Act (FWPCA). If more than one method of analysis of a substance is approved for use, a method having a detection limit lower than the permit limit shall be used. If the detection limit of all methods is higher than the permit limit, the method having the lowest detection limit shall be used and a report of less than detection limit shall constitute compliance. However, should the Environmental Protection Agency (EPA) approve a method with a lower detection limit during the term of this permit the permittee shall use the newly approved method.

**D. Operation**

1. The drainage field operated under this permit shall function properly and wastewater shall not surface or saturate the uppermost soil layer. Should the drainage field fail to function properly, the permittee shall take corrective action, to include cessation of injection, as required by ADEM.
2. The permittee shall adopt the following best management practices:
  - a) Inspect terminal equipment, tanks, and chemical containers regularly for leaks.
  - b) Calibrate treatment and application equipment regularly.
  - c) Comply with Federal, State, and local solids and liquid waste disposal regulations.

**PART II Records, Reports, & Submittals**

**A. Records**

1. The permittee shall record the information listed below for all monitoring activities:
  - a) The date, exact place, and time of sampling or sampling measurement(s);
  - b) The name of individual(s) who perform the sampling or measurement(s);
  - c) The date(s) analyses were performed;
  - d) The name of the individual(s) who performed the analyses;
  - e) The analytical or technical methods used;
  - f) The results of each analysis performed; and
  - g) The completed chain-of-custody forms for all samples collected.

2. The permittee shall retain all records concerning the data used to complete the permit application, the operation of the wells, and the nature and composition of pollutants injected; to include records of the calibration of instruments, meters and gauges, quality control records, and recordings from continuous monitoring instrumentation; until at least three years after the closure of well(s).
3. When requested by ADEM, the permittee shall deliver copies of any of the records maintained in accordance with this permit.

B. Reports

1. The reporting period for all monitoring performed under Appendix A shall be annually. Upon the effective date of this permit, the permittee shall submit reports not later than 28 days after the reporting period, whether a discharge occurs from the treatment system or not. The monitoring report which shall include:
  - a) The date and exact place of sampling;
  - b) The results of each analysis performed.
2. **Within 180 days upon the effective date of this permit, the permittee must enroll and participate in the Department's web-based electronic environmental (E2) DMR reporting system.** Once the permittee is enrolled in the E2 DMR system, the permittee must utilize the system for the submittal of DMRs. The Permittee Participation Package may be downloaded online at <https://e2.adem.alabama.gov.npdes>. If the E2 DMR system is down due to technical problems originating with the Department's system, the permittee is not relieved of the obligation to submit DMR data by the required submittal date via faxing, e-mailing, mailing, or hand-delivery of data such that they are received by the required reporting date.
3. The permittee shall report to ADEM any of the following:
  - a) Any planned action which will change the use of the injection wells, will result in injection of a fluid different from that authorized by this permit, will change the method of operations of any injection well, or will change the method of the monitoring of well operations or injected fluids.
  - b) Any planned transfer of ownership of all or part of the permitted facility.
  - c) Any relevant facts of which the permittee becomes aware which should have been submitted in a permit application and any corrections to data previously submitted in a permit application.

4. Other Submittals

Studies, engineering reports, plans and specifications, plugging and abandonment plans, logging reports, and other technical documents submitted to comply with this permit shall be prepared by or under the supervision of qualified persons defined the Underground Injection Control (UIC) Regulations of the ADEM.

**PART III Plugging and Abandonment**

The permittee shall perform any abandonment and closure actions that may be required by ADEM to remove a threat to groundwater quality or to the health of persons which is caused by the injection activity.

**PART IV Permit Modification, Revocation, Suspension, and Termination**

- A. ADEM may impose emergency additional conditions to this permit when necessary to protect waters of the state from pollution. These conditions may include suspension of the permit to inject and shall remain in effect until the permit is modified, revoked, suspended or terminated in accordance with the UIC Regulations of the ADEM.
- B. Non-emergency permit modification, revocation, suspension, and termination actions shall be accomplished in accordance with ADEM Administrative Code Rule 335-6-8.

**PART V General Provisions**

- A. The permittee shall comply with all provisions of the UIC Regulations of the ADEM and shall comply with all provisions of this permit and shall reduce or halt injection if needed to maintain compliance with the permit and regulations.
- B. The permittee shall comply with all applicable Federal and State hazardous waste management regulations.
- C. The permittee shall allow members of the ADEM staff to:
  - 1. access property and records of the permittee for purposes of inspection.
  - 2. collect samples of the injected fluids, process and wastewater streams associated with the permitted injection wells.
  - 3. collect samples from any monitoring wells.
  - 4. obtain copies of records upon request.
- D. The permittee shall immediately take all reasonable steps to minimize or correct any adverse environmental impact resulting from the operation of the permitted injection wells.
- E. This permit does not convey any property rights of any sort, or any exclusive privilege.

- F. The filing of a request by the permittee for a permit modification, revocation, and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.
- G. Any noncompliance with this permit constitutes a violation of the Alabama Water Pollution Control Act and/or the UIC Regulations and is grounds for enforcement action such as permit termination, revocation, modification; or denial of a permit renewal application.
- H. All provisions of ADEM Admin. Code Rule 335-6-8-.12 are incorporated as terms and conditions of this permit by reference.
- I. Injection to waters of the state, which in this case is groundwater, in accordance with this permit shall not result in the exceedance of a Maximum Contaminant Level (MCL) in groundwater as established by the Environmental Protection Agency. Injection to groundwater, in accordance with this permit shall not result in a violation of a surface water quality standard.

## APPENDIX A

The wastewater discharge shall be limited and monitored by the permittee as specified below:\*

<u>EFFLUENT CHARACTERISTIC</u>	<u>UNITS</u>	<u>DISCHARGE LIMITS</u>	<u>MONITORING REQUIREMENTS</u>	
			FREQUENCY	SAMPLE TYPE
Nitrate		10	Quarterly	Grab
Total Suspended Solids	mg/l	Report	Quarterly	Grab
Total Dissolved Solids	mg/l	Report	Quarterly	Grab
Oil and Grease	mg/l	15	Quarterly	Grab
pH	s.u.	Report	Quarterly	Grab
fecal coliform	col/100ml	Report	Quarterly	Grab

\* The Department may reduce the monitoring frequency upon a demonstration of compliance over a satisfactory period of monitoring. Also, the Department may increase the monitoring frequency if compliance with the permit is not maintained.

## Appendix B

The groundwater monitoring wells shall be sampled and limited by the permittee as specified below:

<u>GROUNDWATER CHARACTERISTIC</u>	<u>UNITS</u>	<u>GROUNDWATER LIMITS</u>	<u>MONITORING REQUIREMENTS</u>	
			FREQUENCY	SAMPLE TYPE
Total Nitrate	mg/l	10	Quarterly	Grab
pH	Standard	6.5-8.5	Quarterly	Grab



## ADEM Permit Rationale

Date: June 22, 2017

Prepared by: Joe Kelly

Permit Applicants: Adam and Renee Cox  
1901County Road 16  
Florence, AL 35633

Facility Name: Cox Butcher Shop

Location: 1901County Road 16, Florence, AL 35633  
Town 2, Range 12, Section 22  
Lauderdale County, Alabama

UIC Permit Number ALSI9939697

Draft Permit is: Reissuance Due to Expiration

Injection Description: Treated wash down water from a slaughter house.

Discussion: Standard permit drafted.

1. Injection of treated wash down water only
2. Effluent treatment required
3. Effluent sampling required
4. Groundwater monitoring required